And now, a word about compatibility

by B. Anne Hallman, CNA

Ads for computing products tout some amazing low-priced deals on equipment which was only a computer geek's fantasy a few years ago. Since the 1940s, the telephone company has been telling us that they would soon be selling video phones. But it was a computer company who made it happen. Connectix retails its QuickCam for Macs or PCs for $95 and sells additional software to make your workstation into a video phone for about $50. Home-use external modems now boast software faxes and multiple voice mail boxes. These cost around $100.

Does that sound too good to be true? It is. Oh, the products deliver everything their ads say they will, but if, and only if, they are connected to the right equipment. For instance, the QuickCam is made to plug into a serial or parallel port on the back of a computer, where it draws its power supply. But laptops, whether PC or Mac, weren't designed to supply additional electricity to peripheral devices. They barely draw enough to power themselves when they are running on batteries.

And the voice mail part of a modern modem may not work at all on your computer, or voice recordings may sound choppy and garbled. That modem is working properly, but the UART (Universal Asychronous Receiver/Transmitter) chip inside most computers is not made to handle that much data flowing through it. Additionally, this chip may be difficult or impossible to upgrade. Many computers have 8250 or 16450 model UART chips which are firmly attached to the motherboard inside the computer. In order to upgrade these UARTs, one or more of the internal serial ports must be disabled and replaced with a separately-purchased serial-port board featuring a 16550 UART with voice operation.

What can the average computer owner do to protect themselves from compatibility problems when purchasing new accessories for an older machine? First, purchase all equipment only from local or mail-order firms which accept returns in case of compatibility problems. Ask before you buy; don't assume companies will take your unusable, but brand-new item back again. Tell your retailer exactly what equipment you have and the conditions under which it will be operated. Most sales people aren't familiar with performance requirements, but in the event of any difficulties, at least you can say you did your part to avoid them and were assured that the item you purchased was compatible.

Finally, make sure your chosen company offers technical support for everything they sell. Mail order firms should have cost-free customer service, accessed by a toll-free phone number in case you have a question about your order, and technical support in case you can't make your purchase work after following all those installation instructions. Many retailers will only accept returns if you have gotten an authorization number from their technical support department. Remember to write that number on the outside of the box if you must mail your purchase back again. And don't send the item COD, since most companies don't accept parcels with postage due.